CAPS Survey Report

Year:	2016
State:	Kansas
Cooperative Agreement Name:	Exotic Wood Borer/Bark Beetle Survey
Cooperative Agreement Number:	16-8420-1923-CA
Project Funding Period:	January 1, 2016 – December 31, 2016
Project Report:	CAPS Survey Report
Project Document Date:	January 1, 2016 – December 31, 2016
Cooperators Project Coordinator:	Laurinda Ramonda
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Quarterly Report	☐
Semi-Annual Accomplishment Report	☐
Annual Accomplishment Report	☒

A. Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. When the output can be quantified, a computation of cost per unit is required when useful

Participants: Laurinda Ramonda – provide training, supervision and shipping of samples to lab
Greg Chrislip, state entomologist – provide training, supervision and specimen sorting
Kristina Hamilton - trapping and survey work

- December 8, 2015 – Pre-award letter signed for $2,088
- December 10, 2015 – Partial cooperative agreement signed for $2,088
- April 27, 2016 – Full funding cooperative agreement signed for $8,509 – Total amount for $10,597
- Mid-March – Kristina Hamilton hired for seasonal position
- May 11, 2016 – Setting traps began
- May 25, 2016 – Traps all set. Lindgren funnel traps for the Japanese pine sawyer and oak ambrosia beetle were only set because no lure arrived for the European hardwood ambrosia beetle. The cross-vane trap – only three of the traps contained three lures for the black spruce beetle because only three spruce blend lures were received.
- June 3, 2016 – Began surveying for Cerceris wasp colonies.
- June 29, 2016 – Received lineatin lure for trapping the European hardwood ambrosia beetle.
- July 22, 2016 – All traps removed and visuals complete.

Funding Amount (USDA)	Funding Amount (KDA)	Total Number of Traps/Visuals	Cost Per Unit
Proposed = $10,597	Proposed = $603	Proposed = 100 Traps, 25 visuals	Proposed= $89.60
Actual = $10,597	Actual = $603	Actual = 75 Traps, 21 visuals	Actual = $110.45

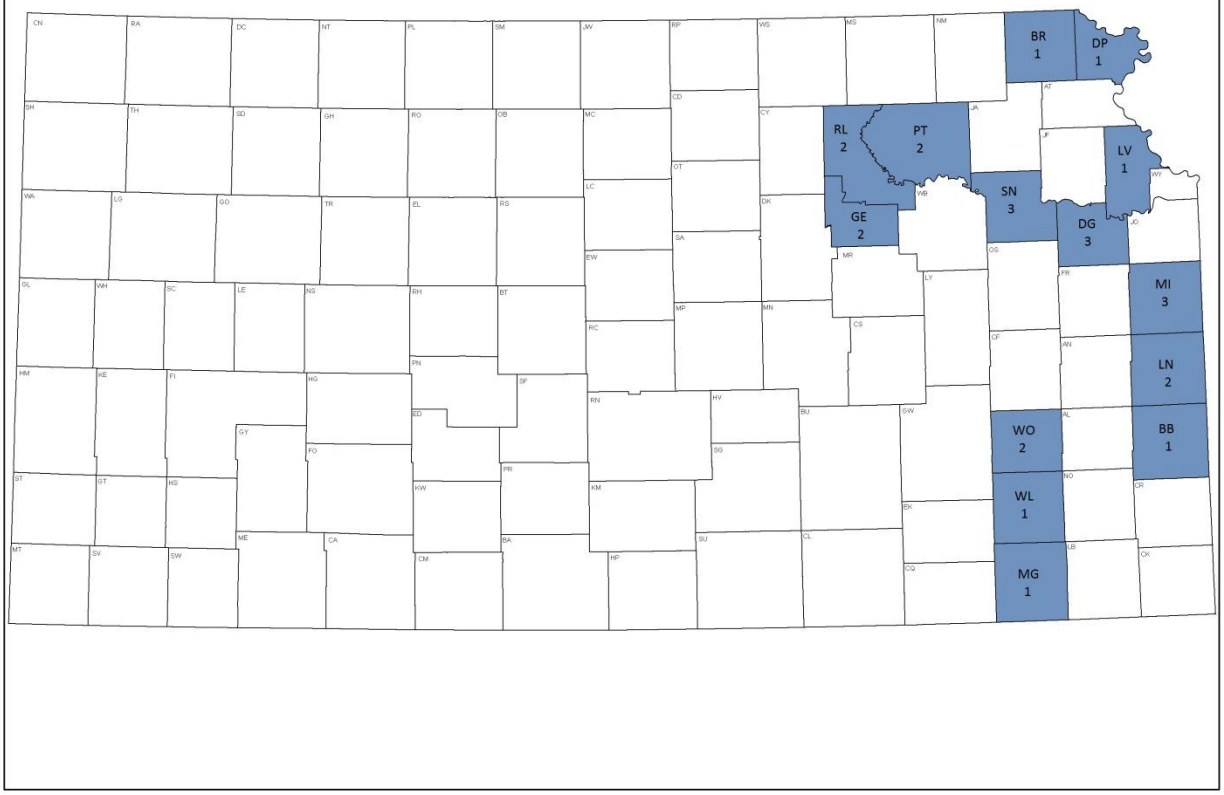
1. <u>Survey methodology (trapping protocol)</u>:

	Common Name	Scientific Name
Pest:	Japanese pine sawyer	*Monochamus alternatus*
	oak ambrosia beetle	*Platypus quercivorus*
	European hardwood ambrosia beetle	*Trypodendron domesticum*
	black spruce beetle	*Tetropium castaneum*
	cerceris wasp	*cerceris fumipennis*
	goldspotted oak borer (if cerceris wasp found)	*Agrilus auroguttatus*
	oak splendor beetle (if cerceris wasp found)	*Agrilus biguttatus*
	European oak borer (if cerceris wasp found)	*Agrilus sulcollis*
	emerald ash borer (if cerceris wasp found)	*Agrilus planipennis*
	jewel beetle (if cerceris wasp found)	*Agrilus sulcicollis*

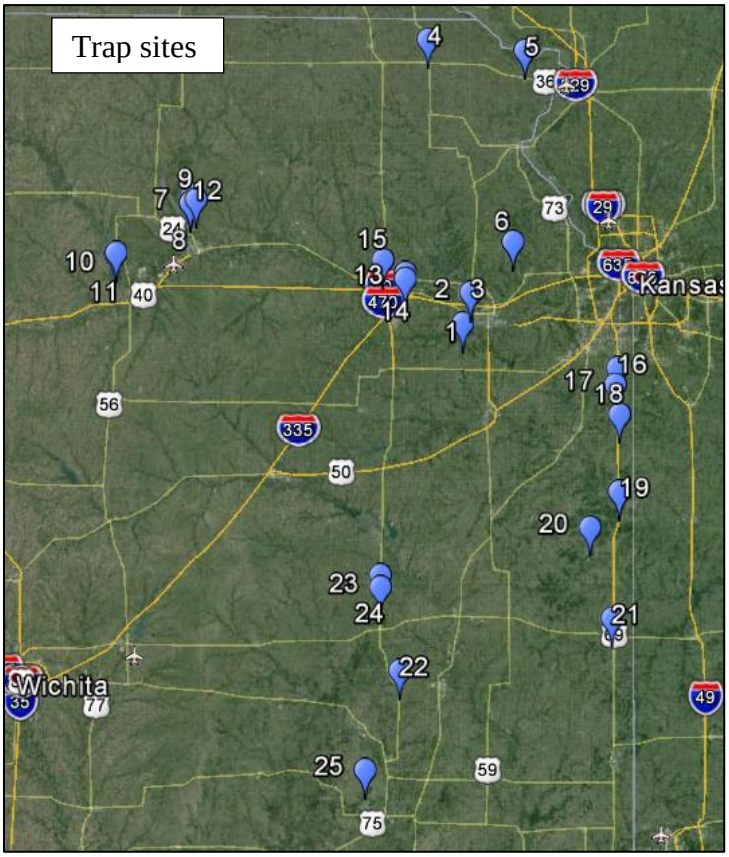
	Proposed	Actual
Sites (Locations):	25	25
Traps:	100	75
Visuals:	25	21

	Proposed	Actual (traps)	Actual (visuals)
Number of Counties:	14	14	13
Counties:	Bourbon, Brown, Doniphan, Douglas, Geary, Leavenworth, Linn, Miami, Montgomery, Pottawatomie, Riley, Shawnee, Wilson, Woodson	Bourbon, Brown, Doniphan, Douglas, Geary, Leavenworth, Linn, Miami, Montgomery, Pottawatomie, Riley, Shawnee, Wilson, Woodson	Bourbon, Brown, Doniphan, Douglas, Geary, Leavenworth, Linn, Miami, Montgomery, Riley, Shawnee, Wilson, Woodson

Counties and Number of Locations Planned for Survey



Exotic Wood Borer/Bark Beetle Survey	
County	**No. of Sites**
Bourbon	1
Brown	1
Doniphan	1
Douglas	3
Geary	2
Leavenworth	1
Linn	2
Miami	3
Montgomery	1
Pottawatomie	2
Riley	2
Shawnee	3
Wilson	1
Woodson	2
Total	**25**

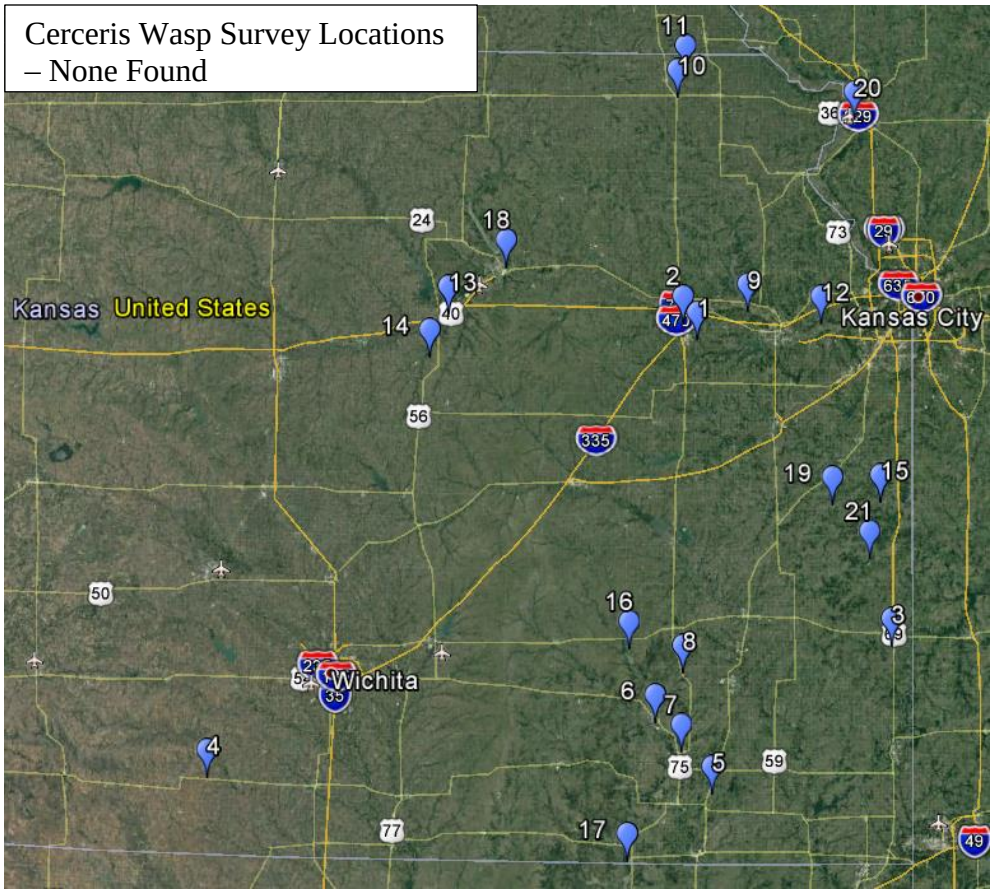


Lindgren funnel trap in pine tree

Cross-vane trap in pine tree

Cerceris Fumipennis Survey	
County	**No. of Sites**
Bourbon	1
Brown	2
Doniphan	1
Douglas	1
Geary	2
Leavenworth	1
Linn	3
Miami	0
Montgomery	3
Pottawatomie	0
Riley	1
Shawnee	2
Wilson	3
Woodson	1
Total	**21**

Only 21 suitable sites to check for Cerceris fumipennis



The cerceris wasp was not found. None of the below pests were surveyed.

	Common Name	Scientific Name
Pest:	goldspotted oak borer (if cerceris wasp found)	*Agrilus auroguttatus*
	oak splendor beetle (if cerceris wasp found)	*Agrilus biguttatus*
	European oak borer (if cerceris wasp found)	*Agrilus sulcollis*
	emerald ash borer (if cerceris wasp found)	*Agrilus planipennis*
	jewel beetle (if cerceris wasp found)	*Agrilus sulcicollis*

2. **Survey dates:**

	Proposed	Actual
Survey Dates:	May 2016 – June 2016	May 11, 2016 – July 22, 2016

3. **Benefits and results of survey:**

	Positive	Negative	Total Number
Traps	0	75	75
Visuals	0	21	21

4. Database submissions:

Pest	County	Trap	Year	Trap Days	Total Traps	Positive Traps	Pest Count
Black Spruce Beetle - Tetropium castaneum	KS - Bourbon	Cross-vane panel	2016	58	1	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Brown	Cross-vane panel	2016	62	1	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Doniphan	Cross-vane panel	2016	60	1	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Douglas	Cross-vane panel	2016	210	3	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Geary	Cross-vane panel	2016	114	2	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Leavenworth	Cross-vane panel	2016	60	1	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Linn	Cross-vane panel	2016	126	2	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Miami	Cross-vane panel	2016	183	3	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Montgomery	Cross-vane panel	2016	48	1	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Pottawatomie	Cross-vane panel	2016	101	2	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Riley	Cross-vane panel	2016	88	2	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Shawnee	Cross-vane panel	2016	181	3	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Wilson	Cross-vane panel	2016	55	1	0	0
Black Spruce Beetle - Tetropium castaneum	KS - Woodson	Cross-vane panel	2016	110	2	0	0
Total	**14 Counties**				**25**	**0**	**0**

Pest	County	Positives	Negatives	Total
Sphecid wasp ~ Cerceris fumipennis	KS - Bourbon	0	1	1
Sphecid wasp ~ Cerceris fumipennis	KS - Brown	0	2	2
Sphecid wasp ~ Cerceris fumipennis	KS - Dickinson	0	1	1
Sphecid wasp ~ Cerceris fumipennis	KS - Doniphan	0	1	1
Sphecid wasp ~ Cerceris fumipennis	KS - Douglas	0	1	1
Sphecid wasp ~ Cerceris fumipennis	KS - Geary	0	1	1
Sphecid wasp ~ Cerceris fumipennis	KS - Leavenworth	0	1	1
Sphecid wasp ~ Cerceris fumipennis	KS - Linn	0	3	3
Sphecid wasp ~ Cerceris fumipennis	KS - Montgomery	0	3	3
Sphecid wasp ~ Cerceris fumipennis	KS - Riley	0	1	1
Sphecid wasp ~ Cerceris fumipennis	KS - Shawnee	0	2	2

Sphecid wasp ~ Cerceris fumipennis	KS - Wilson	0	3	3
Sphecid wasp ~ Cerceris fumipennis	KS - Woodson	0	1	1
Total	**13 counties**	**0**	**21**	**21**

Pest	County	Trap	Year	Trap Days	Total Traps	Positive Traps	Pest Count
Oak Ambrosia Beetle - Platypus quercivorus	KS - Bourbon	Lindgren funnel with wet cup	2016	58	1	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Brown	Lindgren funnel with wet cup	2016	62	1	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Doniphan	Lindgren funnel with wet cup	2016	60	1	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Douglas	Lindgren funnel with wet cup	2016	210	3	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Geary	Lindgren funnel with wet cup	2016	114	2	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Leavenworth	Lindgren funnel with wet cup	2016	60	1	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Linn	Lindgren funnel with wet cup	2016	126	2	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Miami	Lindgren funnel with wet cup	2016	183	3	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Montgomery	Lindgren funnel with wet cup	2016	48	1	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Pottawatomie	Lindgren funnel with wet cup	2016	101	2	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Riley	Lindgren funnel with wet cup	2016	88	2	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Shawnee	Lindgren funnel with wet cup	2016	181	3	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Wilson	Lindgren funnel with wet cup	2016	55	1	0	0
Oak Ambrosia Beetle - Platypus quercivorus	KS - Woodson	Lindgren funnel with wet cup	2016	110	2	0	0
Total	**14 Counties**				**25**	**0**	**0**

Pest	County	Trap	Year	Trap Days	Total Traps	Positive Traps	Pest Count
Japanese Pine Sawyer - Monochamus alternatus	KS - Bourbon	Lindgren funnel with wet cup	2016	58	1	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Brown	Lindgren funnel with wet cup	2016	62	1	0	0

Japanese Pine Sawyer - Monochamus alternatus	KS - Doniphan	Lindgren funnel with wet cup	2016	60	1	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Douglas	Lindgren funnel with wet cup	2016	210	3	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Geary	Lindgren funnel with wet cup	2016	114	2	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Leavenworth	Lindgren funnel with wet cup	2016	60	1	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Linn	Lindgren funnel with wet cup	2016	126	2	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Miami	Lindgren funnel with wet cup	2016	183	3	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Montgomery	Lindgren funnel with wet cup	2016	48	1	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Pottawatomie	Lindgren funnel with wet cup	2016	101	2	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Riley	Lindgren funnel with wet cup	2016	88	2	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Shawnee	Lindgren funnel with wet cup	2016	181	3	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Wilson	Lindgren funnel with wet cup	2016	55	1	0	0
Japanese Pine Sawyer - Monochamus alternatus	KS - Woodson	Lindgren funnel with wet cup	2016	110	2	0	0
Total	**14 Counties**				**25**	**0**	**0**

B. If appropriate, explain why objectives were not met.*

- The European hardwood ambrosia beetle Lindgren funnel traps were not set because the lure was received too late to set them. The project was going to be completed.
- The Japanese pine sawyer Lindgren funnel traps were set using the ethanol and the monochamol lure only because the ultra-high release alpha-pinene lure was not received.
- The black spruce beetle cross vane traps were set with only three traps containing all three lures. The other twenty-two traps had only the ethanol and the geranyl acetol but no spruce blend lure. Only three spruce blend lures were received.

- Wrong addresses were on packages (lures and traps) coming from USDA for supplies though it was correct in the IPHIS ordering system.
- Spruce blend lure never received. Notice was received that it was sent on June 7, 2016 but it had wrong address and was lost. It was too late to use since project was being completed.
- Twenty-one suitable sites were surveyed for cerceris fumipennis not twenty-five.

C. Where appropriate, explain any cost overruns or unobligated funds in excess of $1,000. *

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indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51

Approved and signed by

_____ **Date: _____**

Cooperator

_____ **Date: _____**

ADODR